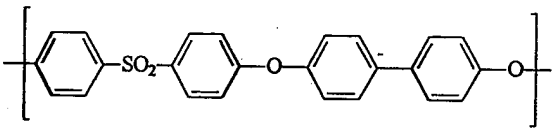
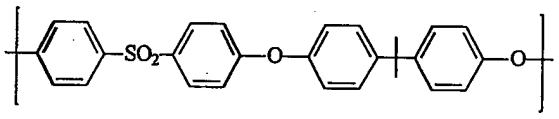
WHAT IS CLAIMED IS:

1. An insulated magnet wire comprising a metallic magnet wire and a polymer composition insulation coating, said polymer composition insulation coating comprising a blend of a polyphenylsulfone (PPSF) and a polysulfone (PSF), wherein the PPSF comprises the following structural repeat unit:



and the PSF comprises the following structural repeat unit:



2. The insulated magnet wire according to claim 1, wherein the insulation coating comprises from about 20 wt. % to about 80 wt. % PPSF and about 20 wt. % to about 80 wt. % PSF based on the total polymer weight.

3. The insulated magnet wire according to claim 2, wherein the insulation coating comprises greater than 50 wt. % PPSF based on the total polymer weight.

4. The insulated magnet wire according to claim 1, wherein the insulation coating comprises about 70 wt. % PPSF and about 30 wt. % PSF based on the total polymer weight.

5. The insulated magnet wire according to claim 1, wherein the insulation coating comprises about 55 wt. % PPSF and about 45 wt. % PSF based on the total polymer weight.

6. The insulated magnet wire according to any of claims 1 to 5, wherein the insulation coating further comprises at least one reinforcing filler, fiber, pigment and/or additive.

7. The insulated magnet wire according to claim 6, wherein the fiber is selected from the group consisting of glass fiber, asbestos, synthetic polymeric fiber, aluminum silicate fiber, wollastonite and rock wool fiber.

8. The insulated magnet wire according to claim 6, wherein the reinforcing filler is selected from the group consisting of glass, calcium silicate, silica, clays, talc and mica.

9. The insulated magnet wire according to claim 6, wherein the pigment is selected from the group consisting of carbon black, titanium dioxide, zinc oxide, iron oxide, cadmium red and iron blue.

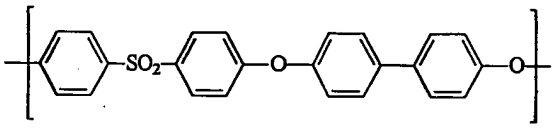
10. The insulated magnet wire according to claim 9, wherein the pigment is titanium dioxide or zinc oxide.

11. The insulated magnet wire according to any of claims 1 to 10, wherein the PPSF can be a copolymer wherein up to less than 50 mole % of the biphenol residue structural units are substituted with one or more aromatic dihydroxy compound residues other than those from biphenol, and wherein the aromatic dihydroxy compound residues other than those from biphenol are selected from the group consisting of 4,4'-isopropylidenediphenol, 4,4'-dihydroxydiphenylether, 4,4'-dihydroxydiphenylsulfone, 4,4'-dihydroxybenzophenone, 1,4-bis(4-hydroxyphenyl) benzene, and hydroquinone.

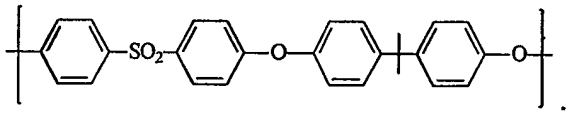
12. The insulated magnet wire according to any of claims 1 to 10, wherein the PSF can be a copolymer wherein up to less than 50 mole % of the bisphenol A residue structural units are substituted with one or more aromatic dihydroxy compound residues other than those from bisphenol A, and wherein the aromatic dihydroxy compound residues other than those from bisphenol A are selected from the group consisting of 4,4'-

dihydroxydiphenylether, 4,4'-dihydroxydiphenylsulfone, 4,4'-dihydroxybenzophenone, 1,4-bis(4-hydroxyphenyl) benzene, 4,4'-dihydroxydiphenyl and hydroquinone.

13. A method for providing an insulated magnet wire with a polymer composition insulation coating, said method comprising the step of coating a polymer composition insulation on a bare metallic magnet wire, said polymer composition insulation coating comprising a blend of a polyphenylsulfone (PPSF) and a polysulfone (PSF), wherein the PPSF comprises the following structural repeat unit:



and the PSF comprises the following structural repeat unit:



14. The method according to claim 13, wherein the insulation coating comprises from about 20 wt. % to about 80 wt. % PPSF and about 20 wt. % to about 80 wt. % PSF based on the total polymer weight.

15. The method according to claim 14, wherein the insulation coating comprises greater than 50 wt. % PPSF based on the total polymer weight.

16. The method according to claim 13, wherein the insulation coating comprises about 70 wt. % PPSF and about 30 wt. % PSF based on the total polymer weight.

17. The method according to claim 13, wherein the insulation coating comprises about 55 wt. % PPSF and about 45 wt. % PSF based on the total polymer weight.

18. The method according to any of claims 13 to 17, wherein the coating step is selected from the group consisting of melt extruding, solvent coating, powder coating and film wrapping.

19. The method according to claim 18, wherein the coating step is melt extruding.

20. The method according to any of claims 13 to 19, wherein the metallic magnet wire is preheated prior to extruding the insulation coating on the metallic magnet wire.

21. The method according to any of claims 13 to 19, wherein the insulation coating is melt filtered prior to it being extruded on the metallic magnet wire.

22. The method according to any of claims 13 to 19, wherein said melt extruding step is free of solvent.

23. The method according to any of claims 13 to 19, further comprising an optional baking means to cure said coating.

24. The method according to claim 23, further comprising cooling the cured coating on said metallic magnet wire.

25. The method according to any of claims 13 to 24, wherein the PPSF can be a copolymer wherein up to less than 50 mole % of the biphenol residue structural units are substituted with one or more aromatic dihydroxy compound residues other than those from biphenol, and wherein the aromatic dihydroxy compound residues other than those from biphenol are selected from the group consisting of 4,4'-isopropylidenediphenol, 4,4'-dihydroxydiphenylether, 4,4'-dihydroxydiphenylsulfone, 4,4'-dihydroxybenzophenone, 1,4-bis(4-hydroxyphenyl) benzene, and hydroquinone.

26. The method according to any of claims 13 to 24, wherein the PSF can be a copolymer wherein up to less than 50 mole % of the bisphenol A residue structural units are substituted with one or more aromatic dihydroxy compound residues other than those from

bisphenol A, and wherein the aromatic dihydroxy compound residues other than those from bisphenol A are selected from the group consisting of 4,4'-dihydroxydiphenylether, 4,4'-dihydroxydiphenylsulfone, 4,4'-dihydroxybenzophenone, 1,4-bis(4-hydroxyphenyl) benzene, 4,4'-dihydroxydiphenyl and hydroquinone.

27. The use of an insulated magnet wire according to any of claims 1 to 12, in a high temperature electrical insulation system.

28. The use of an insulated magnet wire according to claim 27, wherein the high temperature electrical insulation system is selected from the group consisting of voltage transformers, motors, generators, alternators, solenoids, and relays.

29. Use of an insulated magnet wire obtained by the process according to any of claims 13 to 26, in a high temperature electrical insulation system.

30. The use of an insulated magnet wire according to either claim 27 or 29, wherein the high temperature insulation system is selected from the group consisting of voltage transformers, motors, generators, alternators, solenoids, and relays.

31. The use of an insulated magnet wire according to claim 27 or 29, wherein the metallic magnet wire is used in contact with an insulating fluid selected from the group consisting of a mineral oil, a silicone oil, a vegetable oil, a synthetic oil, and mixtures thereof.

32. An electrical device comprising the insulated magnet wire according to any of claims 1 to 12.

33. The electrical device according to claim 32, wherein the electrical device is selected from the group consisting of voltage transformers, motors, generators, alternators, solenoids, and relays.